

### **REMARKS**

In response to paragraph 3 of the Office Action, Applicants are filing another IDS (under separate cover) including copies of the art cited in an IDS filed 3/12/2002 that were evidently inadvertently not provided with that IDS. Payment of the additional fee has been authorized.

### **REJECTIONS UNDER 35 U.S.C. 101**

In response to paragraph 4 of the Office Action, Applicants amend claim 1. See page 24 lines 17 to 21 of the specification.

### **REJECTIONS UNDER 35 U.S.C. 102(b)**

In response to paragraph 5 of the Office Action, Applicants cancel claims 3 and 8-9 and amend claims 1 and 17-18 to more clearly define the invention. Gabbe fails to teach detecting hierarchical changes in the semantic structure of a document model. Column 8 lines 35-67 of Gabbe teach only the filtering of event data (e.g. the press of a mouse button on the graphical user interface). Column 10 line 55 to column 11 line 20 of Gabbe fails to teach ordering changes into entries in a table of contents based on scale span.

### **REJECTIONS UNDER 35 U.S.C. 103(a)**

In response to paragraph 12 of the Office Action, Applicants cancel claims 2 and 2-6. In response to paragraph 17 of the Office Action, Applicants cancel claim 7. In response to paragraph 19 of the Office Action, Applicants cancel claim 11 but respectfully traverse the rejection of claim 10. In response to paragraph 22 of the Office Action, Applicants cancel claims 12-13. In response to paragraph 25 of the Office Action, Applicants cancel claim 14 but incorporate its limitations into claim 10 for brevity. In response to paragraph 27 of the

Office Action, Applicants respectfully traverse the rejection of claim 15. In response to paragraph 29 of the Office Action, Applicants cancel claim 16.

Regarding claim 10, Ratakonda and Hutson neither (separately or in combination) teach nor suggest the use of singular-value decomposition in combination with projection of scaled term occurrence histogram data onto a vector of terms occurring in a document. Hutson is a sonar processing system that is not generally related to the present invention. Regarding the broader concepts of the invention, Applicants note that Ratakonda actually teaches away from the present invention in column 9 lines 30-55 and column 10 lines 64-67. Ratakonda describes that a viewer may start at a coarse level of detail and expand the detail with a mouse click at those parts of a video file that are more interesting to the viewer. Similarly, by moving from finer detail to more coarse detail, Ratakonda teaches replacement of a number of keyframes by a single keyframe. However, only upon manual selection are the indexing schemes of Ratakonda triggered. Ratakonda neither teaches nor suggests the use of singular-value decomposition to resolve difficulties in implementing a system like that taught and claimed by the present invention; in contrast see for example page 5 lines 17-19 of the specification. In fact, Ratakonda neither teaches nor suggests singular-value decomposition at all. Instead, Ratakonda defends the scheme just described by asserting "Further, it is much more efficient to utilize the proposed hierarchical approach than applying the baseline algorithm multiple times to obtain different numbers of keyframes to generate a multi-level summary." (column 10 lines 64-67). This assertion indicates that it would not have been obvious to one of ordinary skill in the art to have considered the use of singular-value decomposition to solve the problem solved by the present invention in a computationally practical manner through the combination of steps claimed. Applicants

note that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)

Regarding claim 15, Applicants note that Stanke is a semiconductor wafer characterization system that is not generally related to the present invention. Stanke performs peak detection on acoustic waveforms and separates multiple signals with a fixed set of filters (column 19 lines 1-5). Gabbe and Stanke neither (separately or in combination) teach nor suggest (a) applying successively smaller scale filter windows to a document model to construct a map of changes in semantic structure versus scale, (b) tracing identified local peaks back to a semantic structure change origin point, or (c) measuring a span of scales over which each said change exists, as taught and claimed in the present invention. In contrast, see for example page 6 lines 4-20 of the specification.

All pending claims are believed to be allowable as amended. The prior art made of record and not relied upon has been carefully reviewed. The Examiner is invited to call Applicants' undersigned representative if a telephone conference will expedite the prosecution of this application.

Respectfully submitted,

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